AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Currently Amended) The use of A method for treating defective or degenerated cartilage in vivo, comprising administering to a subject a mixture of (i) one or more substances of group A) A selected from the group consisting of lubricin, proteoglycan 4 (PRG4) and phospholipids (SAPL); and (ii) with one or more substances of group B) B selected from the group consisting of hyaluronic acid, glycosaminoglycan and derivatives of these substances, wherein said substances are dissolved in a solvent, for the production of an agent for treating defective or degenerated cartilage in vivo.
- 2. (Currently Amended) The use according to method of claim 1, characterized in that the wherein said phospholipids are surface active in nature.
- 3. (Currently Amended) The use according to method of claims claim 1 or 2, characterized in that the wherein said hyaluronic acid has a molecular weight of at least 1 x 10⁶ Da.
- 4. (Currently Amended) The use according to one method of the claims claim 1 to 3, characterized in that wherein the ratio by weight of the substances of group A to the substances of group B ranges from 0.05 to 0.40.
- 5. (Currently Amended) The use according to one method of the claims claim 1 to 3, characterized in that wherein the ratio by weight of the substances of group A to the substances of group B ranges from 0.08 to 0.25.
- 6. (Currently Amended) The use according to one method of the claims claim 1 to 5, characterized in that the wherein said solvent is a Ringer solution, preferably or a physiological salt solution.
- 7. (Currently Amended) The use according to one method of the claims claim 1 to 6, characterized in that wherein the concentration of the substances of group A dissolved in the solvent range ranges from 0.02 to 0.05 % by weight.

- 8. (Currently Amended) The use of one method of the claims claim 1 to 7, eharacterized in that wherein the concentration of the substances of group B dissolved in the solvent range ranges from 0.2 to 0.4% by weight.
- 9. (Currently Amended) The use of A method for the production of a natural cartilage replacement material, comprising dissolving in a solvent a mixture of (i) one or more substances of group A) A selected from the group consisting of lubricin, proteoglycan 4 (PRG4) and phospholipids (SAPL); and (ii) with one or more substances of group B) A selected from the group consisting of hyaluronic acid, glycosaminoglycan and derivatives of these substances dissolved in a solvent, for the production of natural cartilage replacement in vitro.
- 10. (Currently Amended) Method for the production of a cartilage replacement material for cartilage defects in the joint region using a mixture The method of claim 9, characterized in that wherein said natural cartilage replacement material comprises an open-pored, elastic cell-carrier body is populated in its pores with chondrocytes, and wherein a said mixture of claim 9, dissolved in a physiologically acceptable solvent, is brought into contact with the chondrocytes.
- 11. (Currently Amended) The method of claim 10, characterized in that the wherein said solvent is moved over the cell-carrier body with a laminar flow.
- 12. (Currently Amended) The method of elaims claim 10 or 11, eharacterized in that, wherein by means of a joint-like device, an axial and a rotational force is exerted simultaneously on the cell-carrier body.
- 13. (Currently Amended) The method of claim 12, characterized in that wherein the rotation of the joint-like device rotational force is carried out about two axes, which are orthogonal to one another.
- 14. (New) The method of claim 1, wherein the mixture comprises lubricin and hyaluronic acid.
- 15. (New) The method of claim 9, wherein the mixture comprises lubricin and hyaluronic acid.

- 16. (New) The method of claim 1, wherein the mixture comprises lubricin and hyaluronic acid.
- 17. (New) The method of claim 9, wherein the mixture comprises lubricin and glycosaminoglycan.